Fatality Narrative

Electrician Electrocuted When Contact is Made with an Energized Disconnect Switch*

Industry: Electrical contractors Release Date: June 27, 2005

Occupation: Superintendent/electrician Case No.: 04WA06301

Task: Taking measurements behind breaker cabinet SHARP Report No.: 71-36-2005

Type of Incident: Electrocution

On July 20, 2004, a project superintendent/electrician was electrocuted when he made contact with an energized 13,800 volt bus of a disconnect switch. The 56-year-old victim was employed by an electrical contractor. He was a project superintendent for the contractor at a Bureau of Reclamation job site at a dam and an experienced electrician. The victim entered the facility's pumping plant to take some measurements for a planned project. Due to a verbal miscommunication, he believed the area he was accessing was de-energized and did not use the established lockout/tagout procedure agreed upon by the contractor and the Bureau. The victim also did not use a high voltage tester to determine if the circuit was energized. He climbed a 6-foot ladder to access a breaker cabinet, opened the panel of the enclosed disconnect cabinet, and reached inside where he made contact with the energized 13,800 volt bus of the disconnect switch. He received an electrical shock and fell 4 feet from the ladder. He was found a few minutes later by members of his crew who administered emergency aid. The victim was taken unconscious to a hospital where he died 18 days later of complications from the effects of contact with electrical current.

Requirements/Recommendations

(! Indicates items required by law)

- Establish safe work procedures and ensure adequate communication between contractors and facility or site managers. This must include all equipment to be worked on by the contractor.
- Ensure lockout/tagout procedures are effective, and are strictly adhered to by employees and contractors before working near energized equipment or machinery.
- No circuit should be considered de-energized until tested.
- Always use appropriate testing equipment.
- Do not rely on others testing a circuit. Always assume it is live until you test it, even if told it is disconnected.
- Electrical systems must be worked on only in a de-energized state.

State Wide Statistics: This was the 53rd out of 92 work-related fatalities in Washington State during the year 2004, and was the 11th out of 17 construction-related fatalities.

This bulletin was developed at the Washington State Department of Labor and Industries to alert employers and employees in a timely manner of a tragic loss of life of a worker in Washington State. We encourage you to consider the above information as you make safety decisions for or recommendations to your company or constituency. The information in this notice is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

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